

## CHAPTER FIVE

### VOLUNTARY CONSERVATION

These species can be protected by existing management or by specific voluntary conservation and management actions of the federal and state agencies or the private sector. Many occur only on federal lands; consequently, they lie outside the incidental take permit area and cannot be “covered” by a section 10a or section 2081 permit. Most are not listed species and are not subjects of a federal section 7 consultation. The BLM, National Park Service, and the military should voluntarily protect these species on public lands in order to prevent future listings. Others are restricted to state lands and should be protected within parks or ecological reserves. Some are single location disjuncts, or species with very small ranges that can be voluntarily conserved in place without extraordinary measures. No take is anticipated for these localized species.

#### Part A

#### Confined to Federal or State Lands; Protection in Place

Seventeen species (1 reptile, 1 mammal, and 15 plants) were found to occur entirely on federal or state lands. Threats to these species are minimal, and the protections in place are considered adequate for their long-term conservation within the planning area.

#### ARGUS MOUNTAINS KANGAROO RAT (*Dipodomys panamintinus argusensis*)

**Status:** Federal: FWS Species of Concern. California: None

**Date of Evaluation:** October 22, 1998 CDFG Bishop office  
November 4, 1998 FWS Ventura office

**Attendees:** LaPré, Racine, Bransfield

#### Findings

This subspecies may be of doubtful validity, and clarification of the taxonomic status is needed. No threats identified, but possible impacts of cattle grazing should be determined.

**Habitat:** The habitat has not been defined.

**Current Distribution:** This subspecies is known only from the type specimen at the type locality, which is within China Lake NAWS.

#### Voluntary Conservation Measures

- Continue compatible management of the type locality. Encourage research by specialists to determine the validity of the subspecies.

## **PANAMINT ALLIGATOR LIZARD** (*Elgaria panamintina*)

**Status:** Federal: FWS Species of Concern    California: Species of Special Concern

**Date of Evaluation:** April 14, 1998 Riverside BLM District Office

**Attendees:** LaPré, Nicol, Black

### **Findings**

Because this species is not known from private lands within the planning area, it is not subject to permit under the HCP. Because it is not a listed species, it is not the subject of a section 7 consultation. This species should be protected by state and federal agencies under a voluntary conservation agreement.

**Habitat:** Canyon bottoms and talus slopes near springs and riparian drainages.

**Current Distribution:** Only four documented records exist for the Panamint alligator lizard within the planning area, at Margaret Ann Spring (2 records), Haiwee Spring, and Water Canyon, all on the China Lake NAWS. Other canyons in the Argus Mountains on the base and off the base within the Great Falls Basin ACEC (BLM), Argus Mountains Wilderness (BLM) and Indian Joe Spring Ecological Reserve (CDFG) support similar vegetation and have been mapped as potential habitat. All known and potential habitat occurs on federal and state lands.

The distribution of this secretive species is not well known. Within the planning area, only the Argus Mountains are thought to provide suitable habitat. The White Mountains and Nelson Mountains to the north and the Panamint Mountains to the east support the majority of the populations of this lizard, as far as is known.

### **Voluntary Conservation Measures**

- Protect this species on public and military lands through compatible management.
- Disallow water diversions.
- Continue program of removal of feral burros in Argus Mountains.
- Restrict military operations which may impact wetland vegetation near springs.
- Report all sightings to the Natural Diversity Data Base.

**SOUTHERN SIERRA WILDERNESS PLANTS - 8 Species. ERTTER'S MILKVETCH** (*Astragalus ertterae*), **HALL'S DAISY** (*Erigeron aequifolius*), **MUIR'S RAILLARDELLA** (*Raillardiopsis muirii*), **OWENS PEAK LOMATIUM** (*Lomatium shevockii*), **SWEET-SMELLING MONARDELLA** (*Monardella beneolens*), **DEDECKER'S CLOVER** (*Trifolium dedeckerae*), **GILLMAN'S GOLDENBUSH** (*Ericameria gilmanii*), **THE NEEDLES BUCKWHEAT** (*Erigonum breedlovei* var. *Shevockii*).

**Status:** Federal: Ertter's milkvetch, Owens Peak lomatium – FWS Species of Concern.  
Hall's daisy, Muir's raillardella, sweet-smelling monardella, Dedecker's clover,  
Gillman's goldenbush, The Needles buckwheat - None  
California: None

**Date of Evaluation:** By mail beginning June 17, 1998

**Attendees:** LaPré, Black, Rutherford, Showers, Thomas, Meyer

## Findings

These species occupy higher elevations of the southern Sierra Nevada Mountains at the northwestern edge of the planning area. Some are narrow endemics with few known sites; others are more widespread with locations from the adjoining National Forest lands. No current threats were identified, although previous work on the Pacific Crest Trail damaged populations of some species. This has led to a program of modified trail maintenance and monitoring of the sites by the Ridgecrest Resource Area of the BLM. The sites are remote, requiring a 7 mile one-way hike, and are not affected by cattle grazing, vehicles, or timber sales.

**Habitat:** Peaks and ridges between 6,000 and 8,000' elevation in the southern Sierra Nevada Mountains.

**Current Distribution:** Within the planning area, all are found on federal lands in the Owens Peak Wilderness. Botanists working for China Lake NAWS have recently discovered Dedecker's clover at a single location on the NAWS.

## Voluntary Conservation Measures

- Continue the BLM program of education of trail maintenance volunteers. Monitor populations at least once every two years and report findings to the NDDB and the Service.
- Continue botanical searches and monitoring of the location for Dedecker's clover at China Lake NAWS.

**EL PASO MOUNTAINS ENDEMIC PLANTS - 2 Species. RED ROCK TARPLANT**  
(*Hemizonia arida*). **TWISSELMAN'S (RED ROCK) POPPY** (*Eschscholtzia minutiflora* ssp.  
*twisselmannii*)

**Status:** Federal: FWS Species of Concern

California: Red Rock tarplant – Rare. Red Rock poppy – None.

**Date of Evaluation:** June 23, 1998 FWS Ventura office

**Attendees:** Showers, Rutherford, Thomas, Bransfield, Meyer, LaPre

**Findings**

These two species are very local endemics whose entire range is within the planning area. Both were recently described as separate taxa, the tarplant in 1958 and the poppy in 1991.

**Habitat:** Red Rock tarplant occupies seeps, springs, and seasonally moist alluvium within the arid creosote bush scrub community. Red Rock poppy may prefer rhyolite tuffs and granitically derived soils, which are common in the area, but the habitat requirements are not defined.

**Current Distribution:** Red Rock tarplant is found only in Red Rock Canyon and Last Chance Canyon within the State Park. Red Rock poppy is primarily confined to the park, although a few locations have been reported from BLM lands as far west as Searles Station.

**Voluntary Conservation Measures**

- Continue the protective management and monitoring of these plants at Red Rock Canyon State Park.

**DEATH VALLEY ROUNDEAF PHACELIA** (*Phacelia mustelina*)

**Status:** Federal: None. California: None

**Findings**

This species is not rare, threatened, or endangered, nor a federal species of concern. It was included on the West Mojave list of species based on the California Native Plant Society ratings (List 1B, RED 2-1-2).

**Habitat:** Gravelly or rocky slopes within creosote bush scrub or pinyon-juniper woodland communities at 3000 – 6300' elevation. The species appears to be non soil-specific. It grows in cracks of boulders and rock outcrops, regardless of the geologic origin.

**Current Distribution:** A single NDDDB record for this species within the planning area is located in the Coso Mountains on China Lake NAWS. More recent surveys have relocated Death Valley roundleaf phacelia on the base in the same location.

### **Voluntary Conservation Measures**

- Continue management at China Lake NAWS compatible with the conservation of this species.
- Conduct periodic monitoring of the location to determine the numbers and extent of the population.

### **INYO HULSEA** (*Hulsea vestita* ssp. *inyoensis*)

**Status:** Federal: None      California: None

### **Findings**

This species is not rare, threatened, or endangered, nor a federal species of concern. It was included on the West Mojave list of species based on the California Native Plant Society ratings (List 2, RED 2-2-1).

**Habitat:** This species is known from eastern California and western Nevada, where it occurs on steep rocky slopes of desert ranges.

A single record exists for the planning area, a collection by Coville in 1891 from the Coso Mountains. This location is within the China Lake NAWS. Efforts to relocate this population have been unsuccessful.

### **Voluntary Conservation Measures**

- The locality in the Coso Mountains is in an area managed by the Navy in a manner compatible with its conservation. This protection should continue. Any new sightings should be reported to the California Natural Diversity Data Base.
- Because so little is known about this species, especially in the southern portion of its range, biologists should be made aware of its potential occurrence and requested to report botanical findings (positive or negative) when performing surveys in suitable habitat.

## **MOJAVE MILKVETCH** (*Astragalus mojavensis*)

**Status:** Federal: FWS Species of Concern (for var. *hemigyus*)      California: None

### **Findings**

This species is known from a single record (of var. *hemigyus*) on Darwin Mesa in 1941. The plant is believed to be extirpated in California and is proposed as critically endangered in Nevada. Botanical searches at China Lake NAWS have not located the subspecies, but *A. m. mojavensis* has been found in the Argus Mountains.

**Habitat:** Limestone outcrops from 3800 – 5000' elevation.

**Current Distribution:** Known from a single historical location in Inyo County on Darwin Mesa.

### **Voluntary Conservation Measures**

- BLM should assure that the single location is protected from disturbance and conduct periodic surveys to determine if this species can be relocated.

## **NINE MILE CANYON PHACELIA** (*Phacelia novemmillensis*)

**Status:** Federal: FWS Species of Concern.      California: None

### **Findings**

**Habitat:** Found in sandy, gravelly, or rocky soils in the understory of pinyon and/or canyon live oak.

**Current Distribution:** Nine Mile Canyon phacelia is a narrow endemic species of the mountain crest in the southeast headwaters of the Kern River watershed (Chimney Creek) and on upper slopes of the adjacent east-facing canyons in the southern Sierra Nevada Mountains. The majority of this species range within the planning area is in the Owens Peak Wilderness at the upper elevations of Nine Mile Canyon.

### **Voluntary Conservation Measures**

- Revisit the Sand Canyon location for this species to confirm the identification of the phacelias.
- Periodic monitoring of the type locality on Nine Mile Canyon should be conducted, with evaluation of the effects of grazing on the populations.

## **SMALL-FLOWERED ANDROSTEPHIUM** (*Androstephium breviflorum*)

**Status:** Federal: None      California: None

### **Findings**

This species is not rare, threatened, or endangered, nor a federal species of concern. It was included on the West Mojave list of species based on the California Native Plant Society ratings (List 2, RED 3-1-1).

Small-flowered androstephium is very poorly known. No current threats have been identified. Construction of Interstate 15 at Midway destroyed portions of a population in the past. The proposed expansion of Fort Irwin could impact populations southeast of the existing base boundary.

**Habitat:** Open sandy flats and bajadas at low to moderate elevations within the creosote bush scrub community. Small-flowered androstephium is often found in stabilized blowsand.

**Current Distribution:** The majority of the known range is to the east, from the Needles area through southern Nevada and southern Utah to western Colorado and south to northern Arizona. In the planning area, only three populations are known, all on remote federal (BLM) lands.

### **Voluntary Conservation Measures**

- Consider further botanical searches at Twentynine Palms MCAGCC and Fort Irwin to better define the range of this species in the planning area.
- Protection of known sites and monitoring of populations is recommended. Periodic censuses of plants at the known sites in Cronese Valley would better define year-to-year variation.

## **Part B** **Adequately Protected or No Take Anticipated**

Nine species are adequately protected by the current management situation or could be with relatively minor conservation actions, such as continued monitoring. In some cases, laws governing modification of wetlands serve to limit alteration of the preferred habitat.

Two plant species are so vulnerable to extinction that the agencies recommend that no take be allowed. These species can be protected by voluntary conservation measures,

including measures enacted by governing jurisdictions for private lands.

Federally listed species may be covered under section 7 consultation, even though no take is anticipated.

### **YELLOW-EARED POCKET MOUSE** (*Perognathus xanthonotus*)

**Status:** Federal: BLM Sensitive      California: None

#### **Findings**

Although relatively little is known of the habitat requirements and distribution of the yellow-eared pocket mouse, most of its range is on public lands. Several areas are managed as ACEC's by the BLM. Take of this species on private land is expected to have non-significant impacts to the species overall.

**Habitat:** This rodent occurs primarily in sandy soils with moderate shrub cover within Joshua tree woodland, desert scrub, pinyon-juniper, and desert chaparral communities. Elevational range is 3380 – 5300 feet.

**Current Distribution:** Most of the range of the yellow-eared pocket mouse is within the planning area on the eastern slope of the Sierra Nevada Mountains. The species is known from Kelso Valley on the south to Sand Canyon on the north, and apparently suitable, unsurveyed habitat exists both north and south of its defined range.

#### **Voluntary Conservation Measures**

- BLM should continue its program of inventory surveys for this species in the Sand Canyon, Short Canyon, and Jawbone-Butterbrecht ACECs. Studies should direct attention to the potential affects of grazing on the species and its habitat.

### **BROWN-CRESTED FLYCATCHER** (*Myiarchus tyrannulus*)

**Status:** Federal: None      California: Species of Special Concern

**Date of Evaluation:** April 8, 1998 Riverside BLM District Office

**Attendees:** LaPré, Black, Pereksta, Haigh (briefly), Thompson, Jones, Davis

#### **Findings**

The brown-crested flycatcher is habitat-dependent and conservation of habitat generally protects the species. It is a species of special concern in California because of its limited range in the state and restricted habitat.



Existing management of Big Morongo Preserve is adequate for this species.

Existing management at Cushenbury Springs by the private landowner is adequate.

Management in accordance with the Biological Opinion on San Bernardino County's Floodplain Management Plan for the Mojave River will be adequate for the Mojave River localities. However, the Biological Opinion does not cover the brown-crested flycatcher and a significant acreage of unsurveyed habitat exists between Interstate 15 and Helendale.

Modification of riparian and wetland habitat requires permits under the federal Clean Water Act from the Corps of Engineers and Streambed Alteration Agreements from the California Department of Fish and Game. These regulations will remain the primary method of protection of the riparian habitat along the Mojave River. Additional survey data would be very beneficial, however, to determine the best ways to provide advice on avoidance, mitigation, and compensation.

**Habitat:** This species occupies riparian forest found along major streams, springs, and other wetlands within the planning area.

**Current Distribution:** Occurrences are limited to discrete locations within the planning area, especially the Mojave River at Victorville, and Big Morongo Preserve. It has also nested, although not every year, at Cushenbury Springs.

### **Voluntary Conservation Measures**

- For the occurrence on private land at Cushenbury Spring, retention of the riparian habitat in its current situation is adequate for the protection of brown-crested flycatcher.
- Conduct surveys of the riparian habitat in the Mojave River from Interstate 15 downstream to Helendale. Report locations to the Natural Diversity Data Base.
- Prohibit clearing of riparian habitat during the nesting season

### **LEAST BELL'S VIREO (outside Mojave River)**

**Status:** Federal: Endangered California: Endangered

**Date of Evaluation:** April 14, 1998 Riverside BLM District Office

**Attendees:** LaPré, Nicol, Black

### **Findings**

The least Bell's vireo is habitat-dependent and conservation of habitat generally protects

the species.

The goal for desert populations of this species is protection of all remaining occupied habitat (no take).

Existing management of Big Morongo Preserve is adequate for this species.

Management in accordance with the Biological Opinion on San Bernardino County's Floodplain Management Plan for the Mojave River will be adequate for the Mojave River localities subject to clearing by San Bernardino County.

Modification of riparian and wetland habitat requires permits under the federal Clean Water Act from the Corps of Engineers and Streambed Alteration Agreements from the California Department of Fish and Game. These regulations will remain the primary method of protection of the riparian habitat along the Mojave River. Additional survey data would be very beneficial, however, to determine the best ways to provide advice on avoidance, mitigation, and compensation.

**Habitat:** This species occupies riparian forest found along major streams, springs, and other wetlands within the planning area.

**Current Distribution:** Occurrences are limited to discrete locations within the planning area, especially the Mojave River at Victorville and at Big Morongo Preserve. Nesting has also been reported in the Leona Valley near Elizabeth Lake.

### **Voluntary Conservation Measures**

- Recommend that Los Angeles County and City of Palmdale require focused surveys for this species as part of the environmental review process for developments proposed for lands in Leona Valley containing riparian and wetland habitat. Conditions of approval protecting nesting vireos and their habitat should be required.
- Conduct surveys of the riparian habitat in the Mojave River from Interstate 15 downstream to Helendale. Report locations to the Natural Diversity Data Base. Although the areas periodically cleared by San Bernardino County are covered by a Biological Opinion, survey information is needed to insure that future projects along the river do not impact this species.
- Prohibit clearing of riparian habitat during the nesting season.

## **SUMMER TANAGER** (*Piranga rubra*)

**Status:** Federal: None California: Species of Special Concern (Nesting)

**Date of Evaluation:** April 8, 1998 BLM Desert District Office, Riverside

**Attendees:** LaPré, Black, Pereksta, Haigh (briefly), Thompson, Jones, Davis

### **Findings**

The summer tanager is habitat-dependent and conservation of habitat generally protects the species. It is a species of special concern in California because of its limited range in the state and restricted habitat.

Existing management of Big Morongo Preserve is adequate for this species at that location. Existing management at Cushenbury Springs and Big Rock Creek by the private landowners is adequate.

Management in accordance with the Biological Opinion on San Bernardino County's Floodplain Management Plan for the Mojave River will be adequate for the Mojave River localities. However, the Biological Opinion does not cover the summer tanager and a significant acreage of unsurveyed habitat exists between Interstate 15 and Helendale.

Modification of riparian and wetland habitat requires permits under the federal Clean Water Act from the Corps of Engineers and Streambed Alteration Agreements from the California Department of Fish and Game. These regulations will remain the primary method of protection of the riparian habitat along the Mojave River. Additional survey data would be very beneficial, however, to determine the best ways to provide advice on avoidance, mitigation, and compensation.

**Habitat:** Riparian forest found along major streams, springs, and other wetlands within the planning area.

**Current Distribution:** Occurrences are limited to discrete locations within the planning area, especially the Mojave River at Victorville, at Big Morongo Preserve, and at Big Rock Creek near Valyermo. It has also nested, although not every year, at Cushenbury Springs and at Camp Cady and the Yucca Valley golf course.

### **Voluntary Conservation Measures**

- For the occurrences on private land at Cushenbury Spring and Big Rock Creek, retention of the riparian habitat in its current situation is adequate for the protection of summer tanager.
- Acquisition of lands near Big Rock Creek is recommended for the protection of

San Diego horned lizard and short-joint beavertail cactus. If this conservation area is established, it would offer additional protection for the summer tanager.

- Conduct surveys of the riparian habitat in the Mojave River from Interstate 15 downstream to Helendale. Report locations to the Natural Diversity Data Base.
- Prohibit clearing of riparian habitat during the nesting season.

## **VERMILION FLYCATCHER** (*Pyrocephalus rubinus*)

**Status:** Federal: None California: Species of Special Concern

**Date of Evaluation:** April 8, 1998 BLM Desert District Office, Riverside

**Attendees:** LaPré, Black, Pereksta, Haigh (briefly), Thompson, Jones, Davis

### **Findings**

The vermilion flycatcher is habitat-dependent and conservation of habitat generally protects the species. It is a species of special concern in California because of its limited range in the state and restricted habitat. Populations within the planning area appear to be expanding.

Existing management of Big Morongo Preserve is adequate for this species at that location, where it also occurs in the adjacent Covington Park. Habitat at the golf course and Cerro Coso College in Ridgecrest appears to be adequately maintained by existing programs. The nesting birds in Ridgecrest may be threatened by domestic cats.

Management in accordance with the Biological Opinion on San Bernardino County's Floodplain Management Plan for the Mojave River will be adequate for the Mojave River localities. However, the Biological Opinion does not cover the vermilion flycatcher and a significant acreage of unsurveyed habitat exists between Interstate 15 and Helendale.

Modification of riparian and wetland habitat requires permits under the federal Clean Water Act from the Corps of Engineers and Streambed Alteration Agreements from the California Department of Fish and Game. These regulations will remain the primary method of protection of the riparian habitat along the Mojave River. Additional survey data would be very beneficial, however, to determine the best ways to provide advice on avoidance, mitigation, and compensation.

**Habitat:** This bird occupies riparian forest found along major streams, springs, and other wetlands within the planning area.

**Current Distribution:** Occurrences are limited to discrete locations within the planning area, especially the Mojave River at Victorville and Apple Valley, and Big Morongo

Preserve. Riparian habitat bordering the Yucca Valley golf course and Ridgecrest golf course supports this species. Nesting has also been reported from Fort Irwin, Leona Valley, and China Lake.

### **Voluntary Conservation Measures**

- Recommend periodic monitoring of the populations found at China Lake NAWS and Fort Irwin NTC.
- Conduct surveys of the riparian habitat in the Mojave River from Interstate 15 downstream to Helendale. Report locations to the Natural Diversity Data Base.
- Prohibit clearing of riparian habitat during the nesting season

### **YELLOW-BREASTED CHAT (*Icteria virens*)**

**Status:** Federal: None California: Species of Special Concern (Nesting)

**Date of Evaluation:** April 8, 1998 BLM Desert District Office, Riverside

**Attendees:** LaPré, Black, Pereksta, Haigh (briefly), Thompson, Jones, Davis

### **Findings**

The yellow-breasted chat is habitat-dependent and conservation of habitat generally protects the species. It is a species of special concern in California because of its limited range in the state and restricted habitat.

Existing management of Big Morongo Preserve is adequate for this species. Existing management at Camp Cady, the Mojave River, and Cushenbury Springs is adequate.

Riparian restoration at Afton Canyon has improved and increased the habitat available for nesting yellow-breasted chats

Management in accordance with the Biological Opinion on San Bernardino County's Floodplain Management Plan for the Mojave River will be adequate for the Mojave River localities. However, the Biological Opinion does not cover the yellow-breasted chat and a significant acreage of unsurveyed habitat exists between Interstate 15 and Helendale.

Modification of riparian and wetland habitat requires permits under the federal Clean Water Act from the Corps of Engineers and Streambed Alteration Agreements from the California Department of Fish and Game. These regulations will remain the primary method of protection of the riparian habitat along the Mojave River. Additional survey data would be very beneficial, however, to determine the best ways to provide advice on avoidance, mitigation, and compensation.

**Habitat:** This species occupies riparian forest found along major streams, springs, and other wetlands within the planning area

**Current Distribution:** Occurrences are limited to discrete locations within the planning area, especially the Mojave River at Victorville, and Camp Cady, Big Morongo Preserve and Cushenbury Springs. This species has also nested at Afton Canyon.

### **Voluntary Conservation Measures**

- For the occurrences on private land at Cushenbury Springs, retention of the riparian habitat in its current situation is adequate for the protection of yellow-breasted chat.
- Continue monitoring efforts at Big Morongo Preserve. Initiate periodic monitoring at Camp Cady and Afton Canyon.
- Conduct surveys of the riparian habitat in the Mojave River from Interstate 15 downstream to Helendale. Report locations to the Natural Diversity Data Base.
- Prohibit clearing of riparian habitat during the nesting season.

### **YELLOW WARBLER** (*Dendroica petechia brewsteri*)

**Status:** Federal: None California: Species of Special Concern (Nesting)

**Date of Evaluation:** April 8, 1998 Riverside BLM District Office

**Attendees:** LaPré, Black, Pereksta, Haigh (briefly), Thompson, Jones, Davis

### **Findings**

The yellow warbler is habitat-dependent and conservation of habitat generally protects the species. It is a species of special concern in California because of its limited range in the state and restricted habitat.

Yellow warbler is very susceptible to parasitism by the brown-headed cowbird.

Existing management of Big Morongo Preserve is adequate for this species at that location.

Management in accordance with the Biological Opinion on San Bernardino County's Floodplain Management Plan for the Mojave River will be adequate for the Mojave River localities. However, the Biological Opinion does not cover the yellow warbler and a significant acreage of unsurveyed habitat exists between Interstate 15 and Helendale.

Modification of riparian and wetland habitat requires permits under the federal Clean Water Act from the Corps of Engineers and Streambed Alteration Agreements from the California Department of Fish and Game. These regulations will remain the primary method of protection of the riparian habitat along the Mojave River. Additional survey data would be very beneficial, however, to determine the best ways to provide advice on avoidance, mitigation, and compensation.

**Habitat:** This species occupies riparian forest found along major streams, springs, and other wetlands within the planning area.

**Current Distribution:** Occurrences are limited to discrete locations within the planning area, especially the Mojave River at Victorville and Camp Cady, at Big Morongo Preserve and at Big Rock Creek. A single pair nested in the Argus Mountains in 1998, and others may be present in the larger riparian springs and seeps.

### **Voluntary Conservation Measures**

- For the occurrences on private land at Big Rock Creek, retention of the riparian habitat in its current situation is adequate for the protection of yellow warbler.
- Acquisition of lands near Big Rock Creek is recommended for the protection of San Diego horned lizard and short-joint beavertail cactus. If this conservation area is established, it would offer additional protection for the yellow warbler.
- Continue monitoring of this species at China Lake NAWS in conjunction with the periodic monitoring surveys of Inyo California towhee.
- Conduct surveys of the riparian habitat in the Mojave River from Interstate 15 downstream to Helendale. Report locations to the Natural Diversity Data Base.
- Prohibit clearing of riparian habitat during the nesting season.

### **CHARLOTTE'S PHACELIA (*Phacelia nashiana*)**

**Status:** Federal: BLM Sensitive      California: None

### **Findings**

Charlotte's phacelia has a very small distribution, nearly entirely within the planning area. Extensive work by Mary Dedecker has defined its disjunct populations with a high degree of precision. Most of the sites (30 of 37) are under federal and state protection, within Areas of Critical Environmental Concern, Wilderness Areas, and Red Rock Canyon State Park. Loss of some plants on private lands would not significantly impact this species.

**Habitat:** Generally on granitic substrates within pinyon pine woodland at elevations of 2000 – 7200 feet. Grows on naturally disturbed sites, such as talus and washes.

**Current Distribution:** Charlotte's phacelia is found in several of the East Sierra Canyons, including Sand Canyon, Short Canyon, and Nine Mile Canyon, and in the Owens Peak Wilderness. It also ranges east to the El Paso Mountains within Red Rock Canyon State Park and to Volcano Mountain on China Lake NAWs.

### **Voluntary Conservation Measures**

- Monitoring of the populations in Short Canyon and Sand Canyon ACEC's is recommended, as well as at Red Rock Canyon State Park.
- Periodic monitoring of the Volcano Mountain location at China Lake NAWs would better define the numbers and extent of this easternmost population.

### **KERN BUCKWHEAT** (*Eriogonum kennedyi* var. *pinicola*)

**Status:** Federal: FWS Species of Concern    California: None

**Date of Evaluation:** June 23, 1998 FWS Ventura office

**Attendees:** LaPré, Showers, Rutherford, Thomas, Bransfield, Meyer

### **Findings**

Kern buckwheat is a very restricted endemic subspecies known from only four populations. Without protection, it is in danger of extinction, and agency biologists recommend no take for this plant. Wind energy development has impacted two populations, but the remaining stands are fenced.

**Habitat:** Kern buckwheat is found on poorly draining depressions in white bentonite soil. These areas are similar to vernal pools, and also similar to the "pebble plains" of the Big Bear Valley because the surface of the soil contains pebbles, gravel, and rock cemented into the soil surface.

**Current Distribution:** The four known locations are all within the planning area at the western edge in the southern Sierra Nevada Mountains.

### **Voluntary Conservation Measures**

- BLM and Kern County should assure that proposals for wind energy development located near the Kern buckwheat populations strictly avoid the plants and their clay soil habitat. Surveys to search for this species should be required for any proposed developments within five miles of the known locations.



- Restoration of habitat near one of the populations is needed to prevent continuing erosion from a spur road off the primary wind turbine access road. Barriers will be placed near this location to prevent motorcycles from entering the Pacific Crest Trail.
- Fencing on both sides of the road near the Sweet Ridge population will be accomplished.
- Seasonal or permanent closure of an access road from Mojave has been assessed by BLM. Bollards (barriers composed of upright telephone poles) will be placed adjacent to the road to prevent vehicle entry into the clay soil habitat. The condition of the habitat and buckwheat populations will be monitored annually.
- The BLM should establish a Middle Knob Area of Critical Environmental Concern and prepare a management plan that includes protection of the Kern buckwheat populations. Wind energy development should not be permitted within the Middle Knob ACEC.

#### **ROBISON'S MONARDELLA**      (*Monardella robisonii*)

**Status:** Federal: FWS Species of Concern    California: None

**Date of Evaluation:** April 14, 1998 Riverside BLM District Office

**Attendees:** LaPré, Nicol, Black

#### **Findings**

Robison's monardella is very doubtfully distinct from narrow-leaved monardella, and the status of the species as a separate taxon needs resolution.

**Habitat:** This species is found among granitic rock outcrops and boulders at elevations of 3800 – 4500 feet. It primarily occurs in the pinyon-juniper community, but has also been detected in Joshua tree woodland and creosote bush scrub vegetation.

**Current Distribution:** Endemic to the southern portion of the planning area, primarily in the Little San Bernardino Mountains. A few records exist from the north part of Yucca Valley.

#### **Voluntary Conservation Measures**

- Until the taxonomic status of this species is resolved, protection of the known sites is recommended. These are primarily within Joshua Tree National Park at Key's Ranch.

- Surveys for this species should be required for development proposals in the northern portion of Yucca Valley and adjoining San Bernardino County within the range of this species.

### **TRIPLE-RIBBED MILK VETCH** (*Astragalus tricarinatus*)

**Status:** Federal: Endangered    California: None

#### **Findings**

Triple-ribbed milkvetch was listed as an endangered species on October 6, 1998. Critical habitat was not designated. This is a narrow endemic species that is very susceptible to extinction. Recommend no take for triple-ribbed milkvetch.

**Habitat:** Restricted to sandy or gravelly soils in arid canyons at desert's edge. Most commonly found along washes, canyon bottoms and the alluvial fans below. Populations occur at elevations between 1300 and 4000 feet, but are primarily below 2000 feet.

**Current Distribution:** The range of triple-ribbed milkvetch is at the southwest boundary of the planning area, within Big Morongo Canyon. All occurrences are on public (BLM) lands within the Big Morongo Preserve and Area of Critical Environmental Concern. The single location on private land is not threatened by development, nor is it likely to be threatened for the duration of the Plan. Additional locations have recently (1998) been discovered outside the planning area near Desert Hot Springs.

#### **Voluntary Conservation Measures**

- Monitor populations at least once every year and report findings to Natural Diversity Data Base and U. S. Fish and Wildlife Service.
- Initiate surveys within conserved area to attempt to locate new populations.
- Notify Arco (Four Corners Pipeline Company) of listing. Require notification to BLM prior to pipeline maintenance. Pipeline maintenance should be monitored.
- San Bernardino County should require surveys for this species for proposed projects on private lands within five miles of any known locality. Avoidance measures should be specified as mitigation for potential project impacts. Financial compensation to private owners for land acquisition may be required if mitigation is infeasible.